

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/594, 195	01/31/96	TAKABATAKE	A 394-1969

E6M1/0123

EXAMINER

LEE, Y

ART UNIT  
2615

PAPER NUMBER

DATE MAILED: 01/23/97

LOWE PRICE LEBLANC AND BECKER  
99 CANAL CENTER PLAZA  
SUITE 300  
ALEXANDRIA VA 22314

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

## Office Action Summary

Application No. <b>'08/594,195</b>	Applicant(s) <b>Akihiko Takabatake et al</b>
Examiner <b>Y. Lee</b>	Group Art Unit <b>2615</b>

Responsive to communication(s) filed on Jan 2, 1997

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

### Disposition of Claims

Claim(s) 1-26 is/are pending in the application.

Of the above, claim(s) 4-7, 11-13, 15, 18-20, and 24-26 is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 1-3, 8-10, 14, 16, 17, and 21-23 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2615

**Part III DETAILED ACTION**

***Election/Restriction***

1. Applicant's election with traverse of embodiment 2 in Paper No. 5 is acknowledged. The traversal is on the ground(s) that all the embodiments are related to a common concept. This is not found persuasive because as specified on page 2 of the remarks, Applicant clearly showed that the five patentable distinct embodiments are independent inventions and election of one invention following a requirement for restriction is mandatory even though applicant disagrees with the Examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 4-7, 11-13, 15, 18-20, and 24-26 are withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected species, the requirement having been traversed in Paper No. 5.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition

Art Unit: 2615

under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

***Priority***

4. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119, which papers have been placed of record in the file.

***Specification***

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. The disclosure is objected to because of the following informalities:

(1) page 15, line 10, "covert" should be changed to -- convert--; and

(2) page 15, line 25, "A to the banks" should be corrected. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. Claims 1-3, 8-10, 14, 16, 17, and 21-23 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

Art Unit: 2615

subject matter which applicant regards as the invention. For examples:

(1) claims 1-3, 14, 16, 17, and 21-23 are rejected on the ground that they are not directed to the elected subject matter because the metes and bounds of the claims cannot be readily ascertained, rendering the claims vague and indefinite within the meaning of 35 U.S.C 112, second paragraph (MPEP 821). In particular, claims 1-3 direct to embodiment 1 as specified on pages 25-44 of the present invention, wherein the decoding means includes means for extracting information indicating whether a type of the frame of the supplied pixel data included in the bit stream is an I/P picture employed as a reference picture in the decoding processing or a B picture not employed as the reference picture but subject to only display, for identifying the type of the frame, as illustrated in Figures 1-10; claims 14, 16, and 17 direct to embodiment 3 as specified on pages 51-58 of the present invention, wherein upon pull down conversion, decoding of next frame is started when reading of a field to be displayed last is started, as illustrated in Figures 17 and 18; and claims 21-23 direct to embodiment 4 as specified on pages 58-65 of the present invention, wherein a time difference between the starting of decoding a B picture and the starting of reading of B picture for displaying is one field even in processing on a field basis, as illustrated in Figures 19-24;

Art Unit: 2615

(2) claim 8, line 9, and claim 9, lines 2 and 7, "said decoding processing" lacks proper antecedent basis; and

(3) claim 9, line 7, "said timing" lacks proper antecedent basis.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claims 8-10 are rejected under 35 U.S.C. § 102(a) as being anticipated by Auld (5,398,072).

Auld, in Figures 2-6, explicitly discloses a channel buffer in video decoders that is the same picture decoding and display unit for decoding predictively encoded pixel data (I,P,B) of a picture included in an incoming bit stream 21 as specified in claims 8-10 of the present invention, for restoring original pixel data 22 and outputting the restored original pixel data 22 for display on a display unit 34, the picture formed by a frame of a plurality of fields (Fig. 5), the picture decoding and display unit comprising decoding means 28 coupled to receive the bit stream 21, for carrying out the decoding processing on the predictively encoded pixel data (I,P,B) to restore the original

Art Unit: 2615

pixel data 22; storage means 24 coupled to the decoding means 28, for storing the restored pixel data 22 received from the decoding means 28; read means 32 coupled to the storage means 24, for reading pixel data from the storage means 24 for outputting the display unit 34 for display thereon; and control means 36 coupled to the read means 32 and the decoding means 28 for making the decoding means 28 start decoding processing of pixel data of a frame supplied subsequently to a certain frame including a last field to be finally displayed in the certain frame in response to reading of the last field (video buffer verifier) from the read means 32.

With respect to claim 9, the decoding processing of Auld is carried out in units of blocks of the pixel data of prescribed sizes on a screen, the picture including M blocks in a horizontal direction on the screen (col 3, lines 17-35 and col. 5, lines 28-39), the control means 36 further including delay means (Vbv Delay) for delaying the timing for starting the decoding processing of the decoding means 28 by a time required for reading the pixel data of the M blocks from the storage means 24.

With respect to claim 10, the delay means (Vbv Delay) of Auld includes buffer memory means 50 arranged between a pixel data output part of the storage means 24 and an output port of the read means 32 coupled to the display unit 34, for storing the pixel data received from the storage means 24 for a prescribed time.

Art Unit: 2615

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

*Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Moon, Odaka et al, and Yonemitsu et al disclose method and apparatus for coding and decoding a digital video signal for determining a motion vector.

Niimura et al and Veltman et al disclose apparatus for processing band-compressed video image data recording signals having inter-frame and intra-frame signals.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (703) 308-7584.

*Amelia Au*  
AMELIA AU  
PATENT EXAMINER  
GROUP 2600  
*acting spe*

Y. Lee/yl  
January 15, 1997